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SEQUENCE LISTING

<110> SOUTH ALABAMA MEDICAL SCIENCES FOUNDATION

<120> CANCER VACCINES CONTAINING EPITOPES OF ONCOFETAL ANTIGEN

<130> SAMSF 3.4-002

<140> PCT/US03/24518

<141> 2003-08-04

<150> 60/400,851

<151> 2002-08-02

<160> 82

<170> PatentIn Ver. 2.1

<210> 1

<211> 1067

<212> DNA

<213> Mus musculus

<220>

<221> CDS

<222> (86)..(970)

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Gly	Gly	Thr	Asn	Leu	Asp	Phe	Gln	Met	Glu	Gln	Tyr	Ile	Tyr	Lys	Arg	
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Leu	Leu	Leu	Ala	Ala	Arg	Ala	Ile	Val	Ala	Ile	Glu	Asn	Pro	Ala	Asp	
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Arg Gly Thr Ile Ser Arg Glu His Pro Trp Glu Val Met Pro Asp Leu
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Ile Val Ala Ile Glu Asn Pro Ala Asp Val Ser Val Ile Ser Ser Arg
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Asn Thr Gly Gln Arg Ala Val Leu Lys Phe Ala Ala Ala Thr Gly Ala
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Thr Pro Ile Ala Gly Arg Phe Thr Pro Gly Thr Phe Thr Asn Gln Ile
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Gln Ala Ala Phe Arg Glu Pro Arg Leu Leu Val Val Thr Asp Pro Arg
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His Pro Trp Glu Val Met Pro Asp Leu Tyr Phe Tyr Arg Asp Pro Glu
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 <222> (86)..(970)

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 Gly Gly Thr Asn Leu Asp Phe Gln Met Glu Gln Tyr Ile Tyr Lys Arg
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ctg ttg ctc gca gct cga gct att gtt gcc atc gag aat cct gct gac 304
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ggg acc ttc act aac cag atc caa gca gcc ttc agg gag cca cgg ctt 448
 Gly Thr Phe Thr Asn Gln Ile Gln Ala Ala Phe Arg Glu Pro Arg Leu
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cta gtg gtg acc gat ccc agg gct gac cat cag cca ctc aca gag gcc 496
 Leu Val Val Thr Asp Pro Arg Ala Asp His Gln Pro Leu Thr Glu Ala
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tct tat gtc aac ctg ccc acc att gct ctg tgt aac aca gat tct ccc 544
 Ser Tyr Val Asn Leu Pro Thr Ile Ala Leu Cys Asn Thr Asp Ser Pro
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ctg gcg tat gtg gac att gcc atc cca tgc aac aac aag gga gct cac 592
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 <213> Mus Musculus

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 35 40 45
 Ile Asn Leu Lys Arg Thr Trp Glu Lys Leu Leu Ala Ala Arg Ala
 50 55 60
 Ile Val Ala Ile Glu Asn Pro Ala Asp Val Ser Val Ile Ser Ser Arg
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His	Pro	Trp	Glu	Val	Met	Pro	Asp	Leu	Tyr	Phe	Tyr	Arg	Asp	Pro	Glu	
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Glu	Ile	Glu	Lys	Glu	Glu	Gln	Ala	Ala	Ala	Glu	Lys	Ala	Val	Thr	Lys	
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Glu	Glu	Phe	Gln	Gly	Glu	Trp	Thr	Ala	Pro	Ala	Pro	Glu	Phe	Thr	Ala	
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Ala	Gln	Pro	Glu	Val	Ala	Asp	Trp	Ser	Glu	Gly	Val	Gln	Val	Pro	Ser	
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Gln Met Glu Gln Tyr Ile Tyr Lys Arg Lys Ser Asp Gly Ile Tyr Ile
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Ile Val Ala Ile Glu Asn Pro Ala Asp Val Ser Val Ile Ser Ser Arg
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Asn Thr Gly Gln Arg Ala Val Leu Lys Phe Ala Ala Ala Thr Gly Ala
85 90 95

Thr Pro Ile Ala Gly Arg Phe Thr Pro Gly Thr Phe Thr Asn Gln Ile
100 105 110

Gln Ala Ala Phe Arg Glu Pro Arg Leu Leu Val Val Thr Asp Pro Arg
115 120 125

Ala Asp His Gln Pro Leu Thr Glu Ala Ser Tyr Val Asn Leu Pro Thr
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Ile Ala Leu Cys Asn Thr Asp Ser Pro Leu Arg Tyr Val Asp Ile Ala
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Met Leu Ala Arg Glu Val Leu Arg Met Arg Gly Thr Ile Ser Arg Glu
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His Pro Trp Glu Val Met Pro Asp Leu Tyr Phe Tyr Arg Asp Pro Glu
195 200 205

Glu Ile Glu Lys Glu Glu Gln Ala Ala Ala Glu Lys Ala Val Thr Lys
210 215 220

Glu Glu Phe Gln Gly Glu Trp Thr Ala Pro Ala Pro Glu Phe Thr Ala
225 230 235 240

Thr Gln Pro Glu Val Ala Asp Trp Ser Glu Gly Val Gln Val Pro Ser
245 250 255

Val Pro Ile Gln Gln Phe Pro Thr Glu Asp Trp Ser Ala Gln Pro Ala
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<223> Description of Artificial Sequence: Illustrative
mouse/human peptide

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<211> 8

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<223> Description of Artificial Sequence: Illustrative
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<210> 8

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<212> PRT

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mouse/human peptide

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mouse/human peptide

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<213> Mus musculus

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mouse/human peptide

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mouse/human peptide

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mouse/human peptide

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<210> 48
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 <212> PRT
 <213> Mus musculus

<400> 48
Ala Gln Pro Glu Val Ala Asp Trp Ser Glu Gly Val
1 5 10

<210> 49
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Illustrative
mouse/human peptide

<400> 49
Ser Glu Gly Val Gln Val Pro Ser Val Pro Ile Gln
1 5 10

<210> 50
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Illustrative
mouse/human peptide

<400> 50
Gln Val Pro Ser Val Pro Ile Gln Gln Phe Pro Thr
1 5 10

<210> 51
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Illustrative
mouse/human peptide

<400> 51
Thr Glu Asp Trp Ser Ala Ala Pro Thr Ala Gln Ala
1 5 10

<210> 52
<211> 12
<212> PRT
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<220>
<223> Description of Artificial Sequence: Illustrative
mouse/human peptide

<400> 52
Ser Ala Ala Pro Thr Ala Gln Ala Thr Glu Trp Val
1 5 10

<210> 53
<211> 12
<212> PRT
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<220>
<223> Description of Artificial Sequence: Illustrative
mouse/human peptide

<400> 53
Thr Ala Gln Ala Thr Glu Trp Val Gly Ala Thr Thr
1 5 10

<210> 54
<211> 11
<212> PRT
<213> Homo sapiens

<400> 54
Thr Glu Trp Val Gly Ala Thr Thr Asp Trp Ser
1 5 10

<210> 55
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Illustrative
mouse/human peptide

<400> 55
Leu Leu Leu Ala Ala Arg Ala Ile Val
1 5

<210> 56
<211> 9
<212> PRT
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<220>
<223> Description of Artificial Sequence: Illustrative
mouse/human peptide

<400> 56
Leu Ala Ala Arg Ala Ile Val Ala Ile
1 5

<210> 57
 <211> 10
 <212> PRT
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<220>
 <223> Description of Artificial Sequence: Illustrative
 mouse/human peptide

<400> 57
 Pro Leu Arg Tyr Val Asp Ile Ala Ile Pro
 1 5 10

<210> 58
 <211> 32
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Illustrative
 mouse/human peptide

<400> 58
 Glu Ala Ser Tyr Val Asn Leu Pro Thr Ile Ala Leu Cys Asn Thr Asp
 1 5 10 15
 Ser Pro Leu Arg Tyr Val Asp Ile Ala Ile Pro Cys Asn Asn Lys Gly
 20 25 30

<210> 59
 <211> 9
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Illustrative
 mouse/human peptide

<400> 59
 Glu Ala Ser Tyr Val Asn Leu Pro Thr
 1 5

<210> 60
 <211> 9
 <212> PRT
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<220>
 <223> Description of Artificial Sequence: Illustrative
 mouse/human peptide

<400> 60
 Ala Ser Tyr Val Asn Leu Pro Thr Ile
 1 5

<210> 61
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Illustrative
mouse/human peptide

<400> 61
Ser Tyr Val Asn Leu Pro Thr Ile Ala
1 5

<210> 62
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Illustrative
mouse/human peptide

<400> 62
Tyr Val Asn Leu Pro Thr Ile Ala Leu
1 5

<210> 63
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Illustrative
mouse/human peptide

<400> 63
Val Asn Leu Pro Thr Ile Ala Leu Cys
1 5

<210> 64
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Illustrative
mouse/human peptide

<400> 64
Asn Leu Pro Thr Ile Ala Leu Cys Asn
1 5

<210> 65
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Illustrative
mouse/human peptide

<400> 65
Leu Pro Thr Ile Ala Leu Cys Asn Thr
1 5

<210> 66
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Illustrative
mouse/human peptide

<400> 66
Pro Thr Ile Ala Leu Cys Asn Thr Asp
1 5

<210> 67
<211> 9
<212> PRT
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<220>
<223> Description of Artificial Sequence: Illustrative
mouse/human peptide

<400> 67
Thr Ile Ala Leu Cys Asn Thr Asp Ser
1 5

<210> 68
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Illustrative
mouse/human peptide

<400> 68
Ile Ala Leu Cys Asn Thr Asp Ser Pro
1 5

<210> 69
<211> 9
<212> PRT
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<220>
<223> Description of Artificial Sequence: Illustrative
mouse/human peptide

<400> 69
Ala Leu Cys Asn Thr Asp Ser Pro Leu
1 5

<210> 70
<211> 9
<212> PRT
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<220>
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mouse/human peptide

<400> 70
Leu Cys Asn Thr Asp Ser Pro Leu Arg
1 5

<210> 71
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Illustrative
mouse/human peptide

<400> 71
Cys Asn Thr Asp Ser Pro Leu Arg Tyr
1 5

<210> 72
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Illustrative
mouse/human peptide

<400> 72
Asn Thr Asp Ser Pro Leu Arg Tyr Val
1 5

<210> 73
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Illustrative
mouse/human peptide

<400> 73
Thr Asp Ser Pro Leu Arg Tyr Val Asp
1 5

<210> 74
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Illustrative
mouse/human peptide

<400> 74
Asp Ser Pro Leu Arg Tyr Val Asp Ile
1 5

<210> 75
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Illustrative
mouse/human peptide

<400> 75
Ser Pro Leu Arg Tyr Val Asp Ile Ala
1 5

<210> 76
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Illustrative
mouse/human peptide

<400> 76
Pro Leu Arg Tyr Val Asp Ile Ala Ile
1 5

<210> 77
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Illustrative
mouse/human peptide

<400> 77
Leu Arg Tyr Val Asp Ile Ala Ile Pro
1 5

<210> 78
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Illustrative
mouse/human peptide

<400> 78
Arg Tyr Val Asp Ile Ala Ile Pro Cys
1 5

<210> 79
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Illustrative
mouse/human peptide

<400> 79
Tyr Val Asp Ile Ala Ile Pro Cys Asn
1 5

<210> 80
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Illustrative
mouse/human peptide

<400> 80
Val Asp Ile Ala Ile Pro Cys Asn Asn
1 5

<210> 81

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Illustrative
mouse/human peptide

<400> 81

Asp Ile Ala Ile Pro Cys Asn Asn Lys

1

5

<210> 82

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Illustrative
mouse/human peptide

<400> 82

Ile Ala Ile Pro Cys Asn Asn Lys Gly

1

5